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UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/830,899	08/13/2001	Seungup Paek	A32095-PCTUS	5340

21003	7590	07/03/2006

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EXAMINER
LEROUX, ETIENNE PIERRE

ART UNIT	PAPER NUMBER
2161	

DATE MAILED: 07/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _6/21/2006, refer Interview Summary_ .

2a)☐ This action is **FINAL.**   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-43_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1-43_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on _13 August 2001_ is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

    If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____ .

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

    a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _ .

4)☒ Interview Summary (PTO-413) Paper No(s). _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: .

Claim Status

Claims 1-43 are pending. Claims 1-43 are rejected as detailed below.

Claim Rejections - 35 USC § 102

1.　The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis

for the rejections under this section made in this Office action:

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis

for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-43 are rejected under 35 U.S.C. 102(b) as being anticipate by US Pat No 6,079 issued

to Eleftheriadis et al (hereafter Pat '566).

<u>Claims 1, 17 and 33:</u>

Pat '566 discloses:

(a) at least one multimedia information input interface receiving said multimedia information [MPEG-

4 file, Fig 4, electronic memory 390, col 7, line 25]

(b) a computer processor coupled to said at least one multimedia information input interface receiving

said multimedia information therefrom [Fig 4, CPU 380],

processing said multimedia information by performing object extraction processing to generate

multimedia object descriptions from said multimedia information [read operation module 290 accesses

object table 370 for translation purposes and communicates extracted audiovisual data to MPEG-4

player 360, col 7, lines 35-40]

processing said generated multimedia object descriptions by object hierarchy processing to generate

multimedia object hierarchy descriptions indicative of an organization of said object descriptions [col

3, lines 35-40, tree-structured approach]

wherein at least one description record including said multimedia object descriptions and said

multimedia object hierarchy descriptions is generated for content embedded within said multimedia

information [Fig 4]

(c) a data storage system, operatively coupled to said processor for storing at least said at least one

description record [Fig 4, MPEG-4 player 360, video buffer col 7, lines 40-42]

Claims 2, 18 and 34:

Pat '566 discloses wherein said multimedia information comprises image information, said multimedia

object descriptions comprise image object descriptions, and said multimedia object hierarchy

descriptions comprise image object hierarchy descriptions. [col 3, lines 35-40, tree-structured

approach]

Claims 3 and 19:

Pat '566 discloses (a) image segmentation processing to segment each image in said image information

into regions within said image, and (b) feature extraction processing to generate one or more feature

descriptions for one or more of said regions, whereby said generated object descriptions comprise said

one or more feature descriptions for one or more of said regions [col 3, lines 20-28]

Claims 4, 20 and 35:

Pat '566 discloses wherein said one or more feature descriptions are selected from the group consisting

of text annotations, color, texture, shape size and position [col 30-40]

Claims 5, 21 and 36:

Pat '566 discloses wherein said object hierarchy processing comprises physical object hierarchy

organization to generate physical object hierarchy descriptions of said image object descriptions that

are based on spatial characteristics of said objects, such that said image object hierarchy descriptions

comprise physical descriptions [col 30-40].

Claims 6, 22 and 37:

Pat '566 discloses wherein said object hierarchy processing further comprises logical object hierarchy

organization to generate logical object hierarchy descriptions of said image object descriptions that are

based on semantic characteristics of said objects, such that said image object hierarchy descriptions

comprise physical and logical descriptions [col 2, lines 5-10]

Claims 7 and 23:

Pat '566 discloses image segmentation processing to segment each image in said image information

into regions within said image and (b) feature extraction processing to generate object descriptions for

one or more of said region, and wherein said physical hierarchy organization and said logical hierarchy

generate hierarchy descriptions of said object descriptions for said one or more of said regions [col 2,

lines 5-10]

Claims 8 and 24:

Pat '566 discloses further comprising an encoder receiving said image object hierarchy descriptions

and said image object descriptions, and encoding said image object hierarchy descriptions and said

image object descriptions into encoded descriptions information, wherein said data storage system is

operative to store said encoded description information as said at least one description record [Fig 4,

390]

Claims 9, 25 and 38:

Pat '566 discloses wherein said multimedia information comprises video information, said multimedia

object descriptions comprise video object descriptions including both event descriptions and object

descriptions, and said multimedia hierarchy descriptions comprise video object hierarchy descriptions

including both event hierarchy descriptions and object hierarchy descriptions [col 1, lines 30-40]

Claims 10 and 26:

Pat '566 discloses (a) temporal video segmentation processing to temporally segment said video information into one or more video events or groups of video events and generate event descriptions for said video events, (b) video object extraction processing to segment said one or more video events or groups of video events into one or more regions, and to generate object descriptions for said regions; and (c) feature extraction processing to generate one or more event feature descriptions for said one or more video events or groups of video events, and one or more object feature descriptions for said one or more regions; wherein said generated video object descriptions include said event feature descriptions and said object descriptions [col 3, lines 30-40]

Claims 11, 27 and 39:

Pat '566 discloses wherein said one or more event feature descriptions are selected from the group consisting of text annotations, shot transition, camera motion, time and key frame, and wherein said one or more object feature descriptions are selected from the group consisting of color, texture, shape, size, position, motion, and time [col 3, lines 27, 28, col 3, lines 30-35]

Claims 12, 28 and 40:

Pat '566 discloses wherein said object hierarchy processing comprises physical event hierarchy organization to generate physical event hierarchy descriptions of said video object descriptions that are based on temporal characteristics of said video objects, such that said video hierarchy descriptions comprise temporal descriptions [col 3, lines 15-45]

Claims 13, 29, 41 and 43:

Pat '566 discloses wherein said object hierarchy processing further comprises logical event hierarchy organization to generate logical event hierarchy descriptions of said video object descriptions that are based on semantic characteristics of said video objects, such that said hierarchy descriptions comprise both temporal and logical descriptions [col 4, lines 1-15]

Claims 14, 30 and 42:

Pat '566 discloses wherein said object hierarchy processing further comprises physical and logical object hierarchy extraction processing, receiving said temporal and logical descriptions and generating object hierarchy descriptions for video objects embedded within said video information, such that said video hierarchy descriptions comprise temporal and logical event and object descriptions [col 3, line 15 through col 4, line 15]

Claims 15 and 31:

Pat '566 discloses (a) temporal video segmentation processing to temporally segment said video information into one or more video events or groups of video events and generate event descriptions for said video events, (b) video object extraction processing to segment said one or more video events or groups of video events into one or more regions, and to generate object descriptions for said regions', and (c) feature extraction processing to generate one or more event feature descriptions for said one or more video events or groups of video events, and one or more object feature descriptions for said one or more regions; wherein said generated video object descriptions include said event feature descriptions and said object descriptions, and wherein said physical event hierarchy organization and said logical event hierarchy organization generate hierarchy descriptions from said event feature descriptions, and wherein said physical object hierarchy organization and said logical object hierarchy organization generate hierarchy descriptions from said object feature descriptions [col 3, line 15 through col 4, line 15]

Claims 16 and 32:

Pat '566 discloses an encoder receiving said video object hierarchy descriptions and said video object descriptions, and encoding said video object hierarchy descriptions and said video object descriptions into encoded description information, wherein said data storage system is operative to store said

encoded description information as said at least one description record [col 3, line 15 through col 4, line 15]

Response to Arguments

Applicant's arguments filed in Appeal Brief of 3/3/2006, have been fully considered and are persuasive. However, Applicant's arguments are now moot based on above new art rejection.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Etienne P. LeRoux whose telephone number is (571) 272-4022. The examiner can normally be reached Monday through Friday between 8:00 am and 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Gaffin, can reached on (571) 272-4146. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Etienne LeRoux

6/22/06